

APPENDIX O

RECOMMENDED GAGES FOR SHEET METAL DUCT CONSTRUCTION

Table O-1. Recommended Gages for Sheet Metal Duct Construction ^a

Aluminum B. & S. gage	Steel U. S. std. gage	Maximum size, inches	Type of transverse joint connections ^b	Bracing
24	26	Up to 12	S-drive, pocket or bar slips, on 7-ft. 10-in. centers.	None.
		13 to 24	S-drive, pocket or bar slips, on 7-ft. 10-in. centers.	None.
22	24	25 to 30	S-drive, 1-in. pocket or 1-in. bar slips, on 7-ft. 10-in. centers. ^c	1- x 1- x 1/8-in. angles 4 ft. from joint.
		31 to 40	Drive, 1-in. pocket or 1-in. bar slips, on 7-ft. 10-in. centers. ^c	1- x 1- x 1/8-in. angles 4 ft from joint.
20	22	41 to 60	1 1/2-in. angle connections, or 1 1/2-in. pocket or 1 1/2-in. bar slips with 1 3/8-in. x 1/8-in. bar reinforcing on 7-ft. 10-in. centers. ^c	1 1/2- x 1 1/2- x 1/8-in. angles 4 ft. from joint.
18	20	61 to 90	1 1/2-in. angle connections, or 1 1/2-in pocket or 1 1/2-in. bar slips 3-ft. 9-in. maximum centers with 1 3/8- x 1/8-in. bar reinforcing.	1 1/2- x 1 1/2- x 1/8-in. diagonal angles, or 1 1/2- x 1 1/2- x 1/8-in. angles 2 ft. from joint.
16	18	91 and up	2-in. angle connections or 1 1/2-in. pocket or 1 1/2-in. bar slips 3-ft. 9-in. maximum centers with 1 3/8- x 1/8-in. bar reinforcing. ^d	1 1/2- x 1 1/2- x 1 1/8-in. diagonal angles, or 1 1/2- x 1 1/2- x 1/8-in. angles 2 ft. from joint.

^a For normal pressures and velocities utilized in typical ventilating and air conditioning systems. Where special rigidity or stiffness is required, ducts should be constructed of metal two gages heavier. All uninsulated ducts 18 in. and larger should be cross-broken. Cross-breaking may be omitted on uninsulated ducts if two gages of heavier metal are used.

^b Other joint connections of equivalent mechanical strength and air tightness may be used.

^c Duct sections of 3 feet 9 inches with bracing angles omitted may be used instead of 7 foot 10 inch lengths with joints indicated.

^d Ducts 91 in. and larger require special field study for hanging and supporting methods.